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Author(s): Alberto Alesina and Beatrice Weder

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Do Corrupt Governments Receive Less Foreign Aid?

By ALBERTO ALESINA AND BEATRICE WEDER*

The differences in well-being across the world are staggering: income per capita in the United States is 60 times larger than in Ethiopia and about 50 times larger than in Mali.¹ Not surprisingly, there is a demand for transfers of income from rich to poor countries.

International programs to alleviate poverty include bilateral aid, multilateral aid from international organizations, grants at below-market rates, technical assistance, and debt forgiveness programs, just to name a few. The rhetoric that accompanies these programs is that they serve the purpose not only of reducing poverty, but also of rewarding good policies and efficient and honest governments.

For example, the official description by the World Bank of the recent debt relief initiative states that in order to be eligible countries have to show evidence of "sustained implementation of ... economic reform programs." More generally, the World Bank (1998 p. 13) notes that "There is no value in providing large amounts of money to a country with poor policies." Also the World Bank has recently discussed more often and openly the issue of how it is the corruption of the bureaucracy and of the officials of developing countries that lead to bad

policies. The entire World Development Report of 1997 is devoted to this point.

The critics of aid programs argue instead that, contrary to the more or less sincere intentions of the donors, corrupt governments following very poor policies receive just as much aid as less corrupt ones. Furthermore, financial assistance does not often reach the really needy in developing countries, but instead is wasted in inefficient public consumption (see World Bank, 1998). Many critics make an even stronger argument, namely, that not only are corrupt governments not discriminated against in the flow of international assistance, but, in fact, foreign aid fosters corruption by increasing the size of resources fought over by interest groups and factions. This point is made in Jakob Svensson (1998, 2000), and it is consistent with Philip R. Lane and Aaron Tornell's (1996; Tornell and Lane, 1999) "Voracity Effect." Alessandra Casella and Barry Eichengreen (1996) argue that foreign aid may be counterproductive if it delays the adoption of policy reforms.

Given the amount of press that this discussion has received, it is surprising that the relationship between foreign assistance and domestic corruption has not received more systematic attention. This is precisely the goal of this paper. In particular, we ask three questions: First, do less corrupt governments receive more aid or debt relief? Second, do various donors differ in their willingness to discriminate against corrupt governments? Third, does foreign aid reduce or foster corruption?

Regarding the first question, there is no evidence that bilateral or multilateral aid goes disproportionately to less corrupt governments. This result holds both for the entire sample period (1975–1994) and for more recent subperiods. Debt relief is a form of foreign aid that has gained prominence during the last decade and has been little studied: we find no evidence that debt relief programs have been targeted to less corrupt countries.

On the second question, we uncover some interesting differences between donors. Scandi-

* Alesina: Economics Department, Harvard University, Littauer 324, North Yard, Cambridge, MA 02138 (e-mail: aalesina@harvard.edu); Weder: FB 03 Department of Economics, University of Mainz, 55099 Mainz, Germany (e-mail: Beatrice.Weder@uni-mainz.de). For helpful comments, we thank two anonymous referees, William Easterly, Gian Maria Milesi-Ferretti and the participants of a workshop of the United Nations University in Tokyo. We also thank Giuseppe Iarossi and Pablo Zoido-Lobaton for helping us with data and Miguel Braun for research assistance. Alesina is grateful to the National Science Foundation for a grant through the National Bureau of Economic Research. Weder thanks the WWZ Foerderverein for a project grant. Part of this paper was written while she was a research fellow at the Center for Financial Studies in Frankfurt. She thanks the Center for its hospitality.

¹ These figures take into account difference in purchasing power. Data are from the World Bank Development indicators for 1995 (see Table 1).

navian countries and Australia give more to less corrupt governments, while corruption is positively correlated with aid received from the United States, although this donor favors democracies over dictatorships. We do not intend to claim that the United States favors more corrupt government on purpose. The reason for this correlation is probably that the United States pays little attention to corruption, and the other motivations for aid-giving end up favoring more corrupt governments. The reason why Scandinavian donors and Australia can better discriminate is that they did not have colonies and are free from specific political pressures. Multilateral aid, namely, aid from international organizations, does not discriminate against corruption of the receiving country.

The third question is the hardest to answer mainly because data on corruption have been collected for large samples of countries only very recently. Time series on corruption are available from only one source and we examine them to determine whether changes in corruption are associated with increases in aid. The tentative evidence from this exercise suggests that an increase in aid increases corruption, which would be consistent with the "voracity effect."

This paper is at the crossroads of two strands of literature. One is the recent revival of work on the determinants and effects of foreign aid, summarized in World Bank (1998). The empirical work on aid has established three results: (1) foreign aid is most often used for largely wasteful public consumption (Peter Boone, 1994, 1996); (2) countries following good policies are helped by foreign assistance, but the probability that a country adopts "good" policies is not influenced by the amount of foreign aid received (Craig Burnside and David Dollar, 2000), in fact aid may even be counterproductive in some cases (Svensson, 2000); and (3) donor countries disburse foreign aid largely as a function of strategic considerations, rather than real needs of the receiving countries (Alesina and Dollar, 2000). William Easterly (1999) reviews the experience with debt relief programs, and concludes that the programs have been ineffective and not well targeted.

The second strand of the literature is the one on the measurement and consequences of corruption, and includes the empirical work by Paolo Mauro (1995), Stephen Knack and Philip

Keefer (1995), Silvio Borner et al. (1995), Brunetti et al. (1998a), and Simon Johnson et al. (1998). This empirical literature has made some progress in providing various measures of corruption for samples of many countries and the evidence points to a negative effect of corruption on growth. Thus, if our results on foreign aid stand, they suggest that foreign aid does not improve growth by improving the quality of government.

This paper is organized as follows. Section I discusses the questions we are interested in. Section II presents our data. Section III discusses empirically whether the level of corruption in receiving countries influences the level of aid received. Section IV studies whether more aid received by a country fosters corruption. The last section concludes.

I. Questions

The first question we ask is very simple: *Do corrupt governments receive more or less multilateral and bilateral aid, after controlling for other determinants of aid flows?*

Almost every analysis of foreign aid faces an almost insurmountable problem of reverse causality. For instance, the fact that poorer countries receive more aid does not mean that aid causes poverty, but those donors target poor countries. The fact that countries with poorly developed institutions receive more aid (if they do) may mean that donors are trying to help build institutions, not that aid is bad for good governance.

This problem is less serious for corruption: it is hard to argue that aid should go to more corrupt countries to help reduce corruption. Therefore, if one finds that governments that are more corrupt receive more foreign aid, one could safely interpret this finding as a failure in the decision process allocating aid amongst developing countries. An important caveat is, however, that measures of corruption are generally correlated to many other characteristics of countries, like poverty and poor institutional development, which may be targeted by donors. Obviously, one may try to hold all the above-mentioned variables constant (as we do), but these control variables may not solve the problem completely. Note, however, that we do find that some donors manage to discriminate against

measured corruption, even though they give aid to poor countries. This shows that it is not impossible to take corruption into account in choosing how to allocate aid.

In fact, the second question we ask is whether there is a difference between donors, namely, *whether multilateral donors such as international organizations pay more attention to corruption and/or whether there are significant differences among donor countries.*

Bilateral donors may be influenced by a host of factors which have very little to do with corruption. For instance, donor countries typically give disproportionately to their former colonies regardless of their level of corruption. Political alliances and several strategic considerations (e.g., the Middle East) also matter. These considerations may be of greater or lesser importance for different donors. Since international organizations should be less directly affected by the colonial history of the recipients, international alliances, and geopolitical considerations, one may expect that multilateral aid flows may be more responsive to the policies and institutions of receiving countries. Specifically, one may expect that multilateral aid should penalize corruption more than bilateral aid.

The third question is *whether foreign aid increases or decreases corruption.* Why this question is interesting is self-evident. For instance, in the United States, an influential argument often made is that both direct U.S. aid and indirect aid through multilateral organizations is counterproductive and therefore implies an unnecessary burden on the taxpayers.

II. Data

Corruption is very difficult to measure. In this paper, rather than providing a new index or choosing one from the available list, we check our results using all the available cross-country measures of corruption. While we would not trust 100 percent any specific index, we feel more confident if a certain pattern of results is consistent for every measure of corruption. Corruption measures are available from various sources. Most of them are risk assessments by private companies, which sell their expertise to multinational companies and investors. Recently, international agencies have also devel-

oped new measures. We use seven indicators of corruption from six different sources. All these indices are coded such that a higher number means less corruption.

The most frequently used measure of corruption in academic research is one compiled from the International Country Risk Guide (ICRG). This is the only measure that has yearly data since 1982 and it covers the largest number of countries. Our variable constructed using this index, CORRICRG, is defined as follows: A low score means that "high government officials are likely to demand special payments" and "illegal payments are generally expected throughout lower levels" in the form of "bribes connected with import and export licenses, exchange controls, tax assessment, policy protection, or loans" (see Knack and Keefer, 1995). Our second source of corruption data is a survey originally conducted for the World Development Report (1997) and which was subsequently expanded at the University of Basel.² The data are derived from surveys of the private sector in 74 countries. We use two indicators of corruption from this source. The first indicator CORRWDR1 is based on a question of "how frequently firms have to pay bribes in order to do business." The second indicator CORRWDR2 is based on a question, which asked entrepreneurs to rate comparatively the importance of different obstacles to business. The third source of corruption data is from Standard and Poors. The variable CORRSAP reflects "losses and costs" to firms due to corruption.³ The fourth source is Business International (incorporated into the Economist Intelligence Unit) and first used in Mauro (1995). This is an average of the rating from 1980–1983. The indicator reflects experts' assessments on "the degree to which business transactions involve corruption or questionable payments." The fifth source is the World Competitiveness Yearbook by the Institute for Management Development (IMD) in Geneva. It includes a measure of "improper practices such as bribing and corruption." Finally, Transpar-

² See Brunetti et al. (1998b) for a detailed description of the data. The data set is available online at (www.unibas.ch/wvz/wifor/survey).

³ We thank Daniel Kaufmann for sharing these data with us.

TABLE 1—DESCRIPTION OF DATA AND SOURCES

Variable	Description	Source
Aid per capita	Official development assistance (constant \$1987, average 1975–1995)	The World Bank, World Development Indicators
Bilateral aid per capita	OED's bilateral aid, net per capita (constant \$1985)	Alesina and Dollar (2000), OECD
COLSXXX	Number of years as a colony of country XXX since 1900	Alesina and Dollar (2000), CIA [1996]
CORRBI	Business International (BI) corruption indicator average 1980–1993, collected by Mauro (1995): 10 (lowest corruption), 0 (highest corruption)	BI, now Economist Intelligence Unit
CORRICRG	Corruption index from ICRG, annual surveys from 1982–1995: 6 (lowest corruption), 0 (highest corruption)	Knack and Keefer (1995)
CORRIMD	Corruption index from <i>World Competitiveness Yearbook, 1996</i> (original name: improper practices such as bribing and corruption): 10 (lowest corruption), 0 (highest corruption)	Institute for Management Development, IMD
CORRS&P	Losses and costs of corruption, from Standard and Poors [1997], redefined to: 10 (lowest corruption), 0 (highest corruption)	Standard and Poors
CORRTI	Corruption index from Transparency International, survey 1997: 10 (lowest corruption), 1 (highest corruption)	Transparency International
CORRWDR1	Level of corruption index, from survey of World Development Report 1997, plus five additional surveys: 6 (lowest corruption), 1 (highest corruption)	Brunetti et al. (1998b)
CORRWDR2	Corruption as a business obstacle, from survey of World Development Report 1997, plus five additional surveys: 6 (lowest corruption), 1 (highest corruption)	Brunetti et al. (1998b)
Democracy	Political Rights, recoded as: 7 (democratic), 1 (autocratic government) (average 1974–1989)	John Gastil (1990)
Debt relief per capita	Average of debt relief per capita between 1989 and 1997, (in U.S. \$)	Easterly (1999)
FDI + P flows	Net direct and portfolio investment (comprises direct investment in equity capital, reinvested earnings, and other capital associated with intercompany transactions and transactions with nonresidents in financial securities (percent GDP), average 1975–1995)	The World Bank, World Development Indicators
FRDXXX	Percentage of times in which the recipient has voted in the UN as XXX	Alesina and Dollar (2000)
Income	Real GDP per capita, beginning of period	Penn World Tables
Openness	Proportion of years in which the country is open	Sachs and Warner (1995)
Private capital flows	Net private capital flows consist of private debt and nondebt flows. Private debt flows include commercial bank lending, bonds, and other private credits; nondebt private flows are foreign direct investment and portfolio equity investment (percent GDP) (average 1975–1995)	The World Bank, World Development Indicators
Years as a colony	Number of years as colony of any colonizer since 1900	Alesina and Dollar (2000), CIA [1996]

ency International, a nonprofit organization, has provided a summary indicator of corruption. CORRTI is based on a poll of polls, that is, the scores of 5–10 surveys, depending on the country, were aggregated into a summary indicator of corruption. This summary index was first calculated in 1996 and became widely cited in the press. It was also often criticized because it initially included surveys of very different quality. For the 1998 indicator, the methodology

was revised and the summary indicator was improved.⁴

All these indices and their sources are listed in Table 1 together with all the other variables used in this paper. Although each of the seven

⁴ In 1998, the indicator includes the assessment of the previous three years as well. Detailed descriptions and the indicators can be viewed online at (<http://www.transparency.de/documents/cpi>).

TABLE 2—CORRELATION MATRIX OF CORRUPTION INDICATORS

Indicator	Indicator						
	ICRG	WDR1	WDR3	S&P	IMD	BI	TI
ICRG	1						
WDR1	0.68	1					
WDR3	0.67	0.52	1				
S&P	0.50	0.33	0.45	1			
IMD	0.85	0.71	0.80	0.62	1		
BI	0.74	0.65	0.45	0.49	0.77	1	
TI	0.87	0.71	0.79	0.67	0.97	0.67	1

Note: We use the full sample of countries for each simple correlation.

indicators gets at the phenomenon of corruption from a slightly different angle, they are highly correlated as shown by Table 2. Of the 28 cross correlation, 22 are above 0.5; 18 are above 0.6, and 10 are above 0.7. These relatively high correlation provide some confidence in the measures of corruption since most of them were compiled by different institutions using very different experts and survey methodologies.

Our objective is to test whether foreign aid is allocated to countries with less corruption. We control for other determinants of the allocation of foreign aid such as the level of income of recipient countries, their size, economic policies, political system, and historic or political links with donors. These variables include: (a) colonial history of the receiving country; (b) a proxy for political alliance, constructed using the frequency of cases in which the receiving country has voted in the United Nations in the same way as the donor; (c) measures of policies and economic conditions of the receiving countries, such as a measure of openness and, of course, per capita income; (d) a measures of political rights; (e) indicators for Egypt and Israel, to capture the special factors affecting the Middle East; and (f) dummies for each sub-period. The detailed description and sources of control variables are given in Table 1. In order to avoid arbitrary choices with control variables, we adopted the most recent available empirical equation for aid allocation, by Alesina and Dollar (2000).

A few comments on these controls are appropriate. First, UN votes are often considered fairly irrelevant, from the point of view of international politics. However, patterns of UN votes are highly correlated with patterns of al-

liances and commonality of interests. There is, actually, a fairly high dispersion in vote patterns even among Western democracies and their allies. The traditional East/West cutting line was not the only relevant cleavage in UN votes. Second, it is not a priori clear whether a receiving country “buys” foreign aid by its voting pattern in the United Nations or whether foreign aid “rewards” past votes. This is an issue that we do not explore here.

Our measure of openness is taken from Jeffrey D. Sachs and Andrew M. Warner (1995). This index has been criticized as a mixture that includes many indicators of “good” versus “bad” policies, which have little to do with openness per se.⁵ However, for our purposes this summary indicator seems appropriate, because we are not especially interested in openness, per se, but more in an indicator of policy stance. In fact, this index is better for us than a simple measure of trade openness like export over GDP for instance, because donors should target good policies in general, rather than openness strictly defined. We also included measures of institutional development (namely, whether the receiving country is a democracy or not). International organizations and donors may discriminate against certain types of non-democratic governments. Finally, indicators for

⁵ A country is classified as closed if at least one of the five following criteria apply: (i) nontariff barriers cover 40 percent or more of trade; (ii) average tariff rates are 40 percent or more; (iii) the black market exchange rate is depreciated by 20 percent or more relative to the official exchange rate; (iv) the country has a socialist economic system; and (v) the state holds a monopoly on major exports.

Egypt and Israel account for the well-known fact that because of political reasons linked to the Middle East conflict, these countries receive a large amount of aid, especially from the United States. In any case, dropping these indicator variables does not effect our results on corruption.

We are interested in the allocation of foreign aid over the longest possible period for which data are available. However, the awareness of the detrimental effect of corruption on development has increased in the 1990's and that donors' behavior may have changed as a result. In addition, the end of the "cold war" may have reduced the political influences of the two-bloc world. Thus, we examine several time periods, between 1970 and 1995.

We also consider data on debt relief, a recent form of help for poor indebted countries. The HIPC (Highly Indebted Poor Countries) process involves elaborate rules that countries have to follow in order to qualify for debt relief, in particular a track record of sound macroeconomic policy is required. Only very few countries have been able to benefit from the initiative.⁶ Nevertheless, on a bilateral level, debt forgiveness operations started more than a decade ago as part of the work out of the debt crisis of the 1980's and have been conducted throughout the 1990's.⁷ Overall, 95 countries have received an equivalent of about \$115 billion in debt forgiveness (all dollar amounts reported are U.S. dollars). Some large debt relief operations were conducted at the beginning of the 1990's: in 1990 about \$33 billion was forgiven. The four largest recipients received about 45 percent of total relief. Poland received about \$14 billion, Argentina, Mexico, and Egypt about \$12 billion each. In per capita terms, the two countries that benefited most from debt relief were Nicaragua and Guyana with \$1,400 and \$850 of relief per capita, respectively.

Finally, we examine the dynamics of aid and corruption. In order to do so, one would ideally have long time series on corruption. Unfortunately, there is only limited information about the evolution of corruption over time; the only

time series on corruption is from ICRG. We use this indicator to construct a yearly panel for the period 1984–1995.⁸ Regarding the specification of the estimates, there are a number of variables that have been shown to impact on corruption (such as openness, the level of press freedom, or of democratic controls),⁹ but most of these variables have little variation over time. Our specification test the effects of a change of aid (contemporaneous and one-year lagged) on the change in corruption. This specification in first differences eliminates all time invariant determinants of corruption. The one-year lagged growth rate of GDP is included to control for other favorable shifts in the economy (e.g., shifts in terms of trade) that might lead to increased rent seeking and corruption. The lagged value of the endogenous variable is included to account for persistence of corruption. In fact, our measure of corruption shows only small amount of within-country variation, which is consistent with the widespread view that corruption takes long to change significantly.

III. Aid, Debt Relief, and Corruption

A. Total Aid

We begin with a measure of total multilateral and bilateral aid received by developing countries. Table 3 shows results of aid allocation estimates for different periods. The corruption indicator is the long-run average of the ICRG measure. The first column shows results of estimates using five-year averages, covering the period 1975–1995. The second column shows results for the 1980–1990 decade, and the last period results of 1990–1995. There is no significant correlation between the level of corruption and the allocation of foreign aid, regardless of the time period under consideration. In addition, it does not seem that donor behavior has changed in the 1990's, at least as far as corruption is concerned. There is some indication that political interests may have played a smaller role

⁶ See David Andrews et al. (2000) for a detailed description of the HIPC.

⁷ We thank William Easterly for sharing data and information on debt relief.

⁸ ICRG data is available since 1982 but only for a more limited set of countries.

⁹ On this point, see Alberto Ades and Rafael Di Tella (1995), Brunetti and Weder (1999), Miguel Braun and Di Tella (1999), Caroline Van Rijckeghem and Weder (1997), and Svensson (2000).

TABLE 3—OFFICIAL FOREIGN AID AND CORRUPTION:
OLS PANEL REGRESSIONS OF FIVE-YEAR AVERAGES
(DEPENDENT VARIABLE: LOG OF AID PER CAPITA)

Independent variable	Time period		
	1975–1995	1980–1990	1990–1995
Constant	14.58 (5.73)	15.93 (7.77)	14.59 (2.70)
Log(initial income per capita)	–0.56 (–4.99)	–0.67 (–4.31)	–0.67 (–3.55)
Log(population)	–0.62 (–13.44)	–0.63 (–12.48)	–0.53 (–7.37)
Openness	0.53 (3.24)	0.67 (2.66)	0.31 (1.29)
Political rights	–0.03 (–0.85)	–0.06 (–1.02)	0.05 (0.67)
Years as colony	0.01 (2.85)	0.00 (1.72)	0.00 (0.77)
Friend of United States	0.01 (0.70)	0.001 (0.07)	0.001 (0.04)
Friend of Japan	0.01 (0.38)	0.02 (1.04)	0.02 (0.36)
Egypt	2.18 (9.77)	1.83 (15.67)	1.97 (7.62)
Israel	2.69 (2.18)	3.08 (3.27)	3.40 (1.01)
Corruption	–0.02 (–0.39)	0.05 (0.67)	–0.05 (–0.44)
Time dummies	yes	no	no
Adjusted R ² :	0.65	0.65	0.69
Observations:	269	137	64

Notes: Values in parentheses are *t* statistics. Standard errors are calculated using White correction.

in the 1990's than this was the case previously: the variable “years as a colony” and “Israel” are no longer significant. At the same time, the indicator of “openness” also loses significance.

Table 4 checks the robustness of the results by considering other measures of corruption. The table reports the *t* statistic on the corruption variable and the number of observations for the long run (1975–1995) and for the 1990's (1990–1995). In other words, we changed the corruption variable in the regressions of Table 3, and in Table 4 reported, for brevity, only the results of the corruption variable. Note that the number of observations vary widely because of the availability of the corruption index. Looking at the pattern of coefficients, we confirm the result of the previous table, namely that there is no evidence that less corrupt countries receive more aid and that this result holds in the long run as well as during the last decade. In fact, a

majority of coefficient is negative. According to one measure of corruption (WDR1) it appears that more corrupt countries actually received higher aid. However, this result is based on a small sample of only 20 countries.

The lack of significance of the corruption variables is “robust” to many specification tests, available upon request. Regardless of what (reasonable) set of controls is included in the right-hand side of the regressions, we never find any evidence that more corrupt countries receive less aid. In particular, we have also investigated the effect of other institutional features of the receiving country. The type of electoral system does not make a difference, nor the length of tenure of leaders.¹⁰

B. Debt Relief

Table 5 shows the results of three estimates of debt relief. The primary aim of debt relief programs is to lower the overall burden of foreign debt, where the debt burden is usually measured in terms of debt/GDP or debt/exports. Thus in addition to the political and policy variables, we control for the initial debt. The first equation shows that the level of initial debt/GDP explains the allocation of debt relief (not surprisingly). Furthermore, poorer countries received more relief and large countries in terms of population received more than smaller ones. Policy as measured by openness was not significantly associated with debt relief, which is somewhat surprising since debt relief should be targeted to countries with a good policy track record. The political variables “years as a colony” and “political rights” are not significant, showing the same results that were obtained for overall aid for the 1990's.¹¹ Together these variables account for only 30 percent of cross-country variation in debt relief. In column 2 we add the ICRG measure of corruption. The coef-

¹⁰ In the 1975–1995 five-year period regression we measured tenure in office in the first year of each period.

¹¹ The only significant political variable is “friend of Japan,” but we are not sure how to interpret this result. In part, it is because some of the largest recipients such as Poland and Argentina have had a record of “voting with Japan.” The coefficient on this variable falls clearly when these outliers are directly controlled for. However, “friend of Japan” remains significant.

TABLE 4—STATISTICS OF ESTIMATES FOR AID AND CORRUPTION MEASURES

Dependent variable: log of aid per capita	<i>t</i> Statistics						
	CORRICRG	CORRTI	CORRWDR1	CORRWDR2	CORRS&P	CORRIMD	CORRBERI
Panel (5-year averages); time period 1975–1995	–0.39 [269]	0.33 [173]	–0.54 [142]	–1.55 [146]	–0.21 [167]	–0.70 [60]	0.77 [151]
Average 1990–1995; time period 1990–1995	–0.44 [64]	0.11 [45]	–1.79 [20]	–0.14 [20]	0.29 [42]	–0.72 [18]	0.72 [35]

Notes: Table entries are *t* statistics (constructed with White-corrected standard errors), with the number of observations below in square brackets. All regressions include as controls: log(initial income), log(population), Israel, Egypt, openness, democracy, years as a colony, UN friends of the United States, UN friends of Japan, and period dummies (for the upper panel). See Table 1 for descriptions of variables.

TABLE 5—DEBT RELIEF AND CORRUPTION: OLS
ESTIMATES, AVERAGES 1990–1995 (DEPENDENT VARIABLE:
TOTAL DEBT RELIEF FROM 1989 TO 1997
IN THOUSANDS OF U.S. DOLLARS)

Independent variable	(1)	(2)	(3)
Constant	–69.98 (–2.94)	–72.93 (–2.83)	–25.14 (–2.63)
Initial debt/GDP	0.54 (5.96)	0.55 (4.75)	0.47 (10.12)
Log(initial income per capita)	0.90 (1.90)	0.91 (1.64)	0.33 (1.52)
Log(population)	0.81 (3.29)	0.82 (3.02)	0.32 (2.18)
Openness	–0.58 (–0.81)	–0.60 (–0.71)	
Political rights	0.19 (0.83)	0.17 (0.72)	
Years as colony	–0.004 (–0.31)	–0.004 (–0.31)	
Friend of United States	–0.10 (–0.60)	–0.12 (–0.65)	–0.08 (–1.56)
Friend of Japan	0.62 (2.37)	0.65 (2.23)	0.22 (2.34)
Poland			12.51 (12.51)
Argentina			10.81 (16.01)
Egypt			10.29 (25.49)
Mexico			10.82 (16.68)
Corruption		0.11 (0.37)	0.12 (0.69)
Adjusted R^2 :	0.30	0.26	0.86
Observations:	68	61	65

Notes: Values in parentheses are *t* statistics. Standard errors are calculated using White correction. We use the period total (rather than annual averages) because the pattern of debt relief is very lumpy.

ficient on this variable is insignificant. As noted above there are large outliers, that is, a few countries received the bulk of debt relief. The

next equation includes indicators for Poland, Argentina, Egypt, and Mexico in the same specification. The significance of the policy and political variables is not affected but the fit of the regression improves dramatically. The R^2 jumps to 0.86.

The last equation tests if corruption (ICRG) is associated with the amount of debt relief. We find no significant effect. Table 6, constructed like Table 4, confirms this finding for the other measures of corruption.

C. Individual Donors

Table 7 explores whether one can find significant differences in the behavior of individual donors. We have run a TOBIT regression in which the left-hand side is the amount of aid/per capita given by each individual donor. We use the TOBIT procedures since there are “zeros”; some donors do not give to all receiving countries.¹² The controls are listed for every regression and they are slightly different for every regression. For instance, certain donors do not have colonies, and the indicator variable for Israel is relevant only for the United States.¹³

This table shows interesting cross-country differences. Scandinavian countries (plus Australia) seem to give more to less corrupt governments. The fact that Nordic countries

¹² It is worth noting that, actually, the number of “zeros” is not very large. Most donors give to many receiving countries. For this reason, the TOBIT procedures produce results quite similar to standard ordinary least squares.

¹³ We also added an indicator variable for Egypt. Our results are unaffected regardless of whether or not this variable is included.

TABLE 6—STATISTICS OF ESTIMATES FOR DEBT RELIEF AND CORRUPTION MEASURES

Dependent variable: log of debt relief	<i>t</i> Statistics						
	CORRICRG	CORRTI	CORRWDR1	CORRWDR2	CORRS&P	CORRIMD	CORRBERI
Total, 1989–1997	0.70 [65]	0.29 [43]	–0.41 [39]	0.47 [39]	0.53 [40]	1.37 [15]	1.47 [33]

Notes: Table entries are *t* statistics (constructed with White-corrected standard errors), with the number of observations below in square brackets. All regressions include: log(initial income), log(population), UN friends of the United States, UN friends of Japan, and indicators of Egypt, Poland, Argentina, and Mexico. Debt relief is measured in U.S. dollars.

TABLE 7—TOBIT ESTIMATES FOR BILATERAL AID PER CAPITA AND CORRUPTION
(DEPENDENT VARIABLE: LOG(1 + BILATERAL AID PER CAPITA) FOR EACH COUNTRY; AVERAGE, 1970–1995)

Country	CORRICRG	Constant	Log income	Log population	Openness	Democracy	Ex-colony of country	UN friend of country	Israel	Pseudo R^2 [observations]	Number left-censored
<i>Significant (Negative) Relationship:</i>											
United States	–0.20 (–2.50)	7.26 (5.22)	–0.19 (–1.46)	–0.25 (–4.17)	0.59 (1.97)	–0.16 (–2.67)	0.00 (–0.27)	0.02 (2.00)	3.19 (4.14)	0.27 [77]	1
<i>Insignificant (Negative) Relationship:</i>											
Japan	–0.06 (–1.20)	1.89 (1.36)	–0.21 (–2.63)	–0.04 (–1.00)	0.98 (4.67)	–0.01 (–0.25)	–0.02 (–1.73)	0.01 (1.40)		0.24 [77]	0
France	–0.03 (–0.75)	1.82 (2.17)	–0.01 (–0.14)	–0.12 (–4.00)	–0.04 (–0.24)	0.04 (1.33)	0.04 (20.00)	0.01 (0.71)		0.68 [77]	0
Spain	0.00 (–0.12)	–0.02 (–0.06)	0.03 (1.00)	–0.01 (–1.00)	–0.03 (–0.43)	0.01 (1.00)				–0.04 [77]	9
Canada	–0.03 (–0.75)	5.04 (5.36)	–0.19 (–2.71)	–0.15 (–5.00)	–0.03 (–0.19)	–0.07 (–2.33)		–0.01 (–1.00)		0.33 [77]	0
Portugal	–0.02 (–0.67)	–0.52 (–0.90)	0.01 (0.20)	0.00 (0.16)	–0.09 (–0.69)	0.01 (0.50)	0.02 (8.50)	0.00 (0.75)		0.7 [77]	51
<i>Insignificant (Positive) Relationship:</i>											
Italy	0.05 (1.25)	3.34 (4.34)	–0.18 (–3.00)	–0.11 (–5.50)	–0.09 (–0.64)	0.02 (0.67)	0.03 (3.00)	0.00 (–0.40)		0.58 [77]	1
Germany	0.08 (1.60)	6.00 (6.45)	–0.21 (–2.33)	–0.22 (–5.50)	0.20 (0.95)	–0.04 (–1.00)				0.26 [77]	0
United Kingdom	0.06 (1.50)	4.00 (4.71)	–0.18 (–2.57)	–0.15 (–5.00)	0.69 (4.60)	–0.04 (–1.33)	0.02 (10.00)	0.00 (–0.80)		0.67 [77]	3
Switzerland	0.02 (1.00)	1.43 (5.30)	–0.09 (–3.00)	–0.04 (–4.00)	0.03 (0.50)	0.00 (0.17)				–0.44 [77]	1
Netherlands	0.05 (0.17)	4.62 (6.08)	–0.29 (–4.83)	–0.12 (–6.00)	–0.03 (–0.21)	–0.07 (–2.33)	0.01 (1.00)	0.00 (–0.08)		0.53 [77]	0
<i>Significant (Positive) Relationship:</i>											
Australia	0.02 (2.00)	0.39 (1.30)	–0.06 (–3.00)	0.01 (1.00)	0.24 (4.80)	–0.01 (–1.00)	0.18 (45.00)	0.00 (–1.00)		1.9 [77]	4
Scandinavia	0.15 (2.50)	6.00 (5.61)	–0.46 (–4.60)	–0.15 (–3.75)	–0.09 (–0.38)	–0.05 (–1.25)				0.19 [77]	0

Note: Numbers in parentheses are *t* statistics; numbers of observations are reported in square brackets.

allocate their aid “well” is consistent with the results of Alesina and Dollar (2000). Our view is that this is due to the fact that these countries had no colonies, and therefore, their choice of aid allocation is less tied to colonial history and related political influences. As a result, these donors are more free to “pick” recipients rela-

tive to donors with former colonies or more clearly defined strategic interests. At the opposite extreme is the United States, for which the significant negative coefficient on the corruption variable indicates that more U.S. foreign aid goes to more countries that are corrupt. Interestingly the political rights variable indi-

cates that the United States gives relatively more to democratic countries. These results, viewed together, suggest that the United States may be more interested in democratic institutions per se relative to the quality of government. Also, the United States may want to use foreign aid as a political tool to promote certain political outcomes in various parts of the world. The Middle East is an obvious, but not unique, example.

We have also estimated donor by donor regressions using other measures of corruption. Given the relatively low number of observations in several of these, due to data availability plus the “zeros,” we do not show them, but they are available upon request. The pattern of the results is consistent with those of Table 7.

We have also explored whether there are systematic differences between multilateral and bilateral donors. Estimates using the ICRG corruption index show that there are no large differences: Neither one seems to have discriminated against corruption.¹⁴

IV. Dynamic Effects of Aid on Corruption

In this section, we shed some light on the dynamics of aid and corruption, even though it is extremely difficult to address this issue. In fact, while data on corruption capture relatively well large cross-country differences, they are not sufficiently refined to pinpoint accurately the short-term changes in corruption within a country. In a previous draft of this paper, we looked at several specific episodes of large increase in foreign aid. We noted that, in a majority of cases, these changes in aid were accompanied by an increase in corruption (see Alesina and Weder, 1999).

In Table 8, we present some more organized evidence, using a yearly panel 1984–1995, the only period for which a time series on corruption exists. The variable “changes in aid” has a negative and statistically significant coefficient, indicating that an increase in aid is associated with an increase in corruption and vice versa in that corruption appears to be persistent, since the log dependent variable is highly significant. These results are broadly consistent with those

TABLE 8—DYNAMICS OF CORRUPTION AND AID
(DEPENDENT VARIABLE: CHANGE IN CORRUPTION;
YEARLY PANEL)

Independent variable	(1)	(2)
Constant	0.05 (3.66)	0.033 (0.69)
Growth of GNP	−0.003 (−1.69)	−0.002 (−1.27)
Percentage change in aid in U.S. dollars	−0.07 (−1.92)	−0.054 (−1.94)
Percentage change in aid (lagged)	0.034 (1.10)	0.03 (1.18)
Lagged change in corruption	0.17 (3.74)	0.17 (5.50)
Year dummies	no	yes
Adjusted R^2 :	0.04	0.06
Number of countries:	84	84
Number of observations:	848	848

Note: Numbers in parentheses are *t* statistics.

of Svensson (2000) who uses a rather different approach. He estimates a two equation system of aid and corruption (measured by the ICRG variable) and finds that in ethnically fragmented countries windfalls of foreign aid tend to increase corruption. These results on aid and corruption are robust to adding a variable capturing elections or changes of governments in the right-hand side.¹⁵ They also do not change when we add a variable which measures the length of tenure in office of the current government.¹⁶

Our results have to be interpreted cautiously for several reasons. First, given that corruption is measured on a point scale, these results cannot properly discriminate between two alternatives: (i) out of a larger pot of money, does a larger amount of money, in absolute terms, go for corrupt purposes? or (ii) out of a larger pot of money does a larger proportion of it go into corrupt activities? One may argue that only the second alternative imply a true “increase” of corruption.

The second issue is that the one-year lagged change in aid is not significantly associated with subsequent changes in corruption. This could

¹⁵ We found a positive, borderline insignificant coefficient on the election variable, indicating that perhaps after an election there is an attempt at “cleaning up.”

¹⁶ The tenure in office variable is insignificant. All these results are available from the authors upon request.

¹⁴ All these results are available upon request.

suggest that “windfalls” from increased foreign aid are dissipated very quickly. On the other hand, one may argue that the “voracity effect” should imply more long-lasting effects.

Third, we cannot fully resolve the question of causality in the relationship between changes in aid and corruption. It is possible, although somewhat implausible, to argue that an administration that has become more corrupt is also more successful in attracting higher aid (in the same year), somehow bribing or misrepresenting conditions vis-à-vis aid donor. However, such a behavior would not be captured by our measure of corruption, which reflects the local level of bribery and administrative discretion vis-à-vis the private sector. Thus, we would interpret our results as supportive of the thesis that higher aid leads to more rent seeking and corruption.

We perform a series of sensitivity test. For instance, one may suspect that the relationship between aid and corruption may have changed in recent years: with the break up of the former Soviet Union, foreign aid started flowing to transition economies, many of which may have gotten more corrupt in the process of transition. However, neither an indicator for transition economies nor a post-1990 dummy is significant. Including a time-trend variable or year dummies does not alter the results on the aid variables.¹⁷

As noted above, since the estimates are in first differences they are not sensitive to the exclusion of other potential determinants of corruption that vary little over time (such as openness or the form of the political system). However, the dependent variable exhibits very little variation over time. Given the nature of corruption it is not clear how well the variable captures small changes in corruption and we cannot test robustness to measurement of these results since there are no other time series of corruption measures. Therefore, these results on the dynamic relationship between aid and corruption have to be taken very cautiously.

¹⁷ We also experimented with measure of aid scaled by GDP, in per capita terms, or by government spending. The results (available from the authors upon request) were similar.

V. Conclusions

The answer to the question posed in the title is “no.” There is no evidence that less corrupt governments receive more foreign aid. Our vast exploration of the data never uncovered any even weak evidence of a negative effect of corruption on received foreign aid. The same result applies to debt relief program, an additional form of aid.

We found significant differences across donors. Scandinavian donors (the most generous in per capita terms) do reward less corrupt receivers. On the other hand, the United States appears to favor democracies, but seems to pay no attention to quality of government of receiving countries. Finally, we find indications of a “voracity effect” of foreign aid.

REFERENCES

- Ades, Alberto and Di Tella, Rafael.** “Competition and Corruption.” Oxford Applied Discussion Paper Series No. 169, April 1995.
- Alesina, Alberto and Dollar, David.** “Who Gives Foreign Aid to Whom and Why?” *Journal of Economic Growth*, March 2000, 5(1), pp. 33–63.
- Alesina, Alberto and Weder, Beatrice.** “Do Foreign Governments Receive Less Foreign Aid?” National Bureau of Economic Research (Cambridge, MA) Working Paper No. 7108, May 1999.
- Andrews, David; Boote, Anthony; Rizavi, Sayed S. and Singh, Sukhwinder.** “Relief for Low-Income Countries: The Enhanced HIPC Initiative.” *IMF Pamphlet Series*, No. 51, Washington, DC: International Monetary Fund, March 2000.
- Boone, Peter.** “The Impact of Foreign Aid on Savings and Growth.” Mimeo, London School of Economics, 1994.
- . “Politics and the Effectiveness of Foreign Aid.” *European Economic Review*, February 1996, 40(2), pp. 289–329.
- Borner, Silvio; Brunetti, Aymo and Weder, Beatrice.** *Political credibility and economic development*. London, U.K.: Macmillan, 1995.
- Braun, Miguel and Di Tella, Rafael.** “Inflation and Corruption.” Unpublished manuscript, 1999.

- Brunetti, Aymo and Weder, Beatrice.** "A Free Press is Bad News for Corruption." WWZ Discussion Paper No. 9809, University of Basel, 1999.
- Brunetti, Aymo; Kisunko, Gregory and Weder, Beatrice.** "Credibility of Rules and Economic Growth: Evidence from a Worldwide Survey of the Private Sector." *World Bank Economic Review*, September 1998a, 12(3), pp. 353–84.
- . "How Firms in 72 Countries Rate Their Institutional Environment." WWZ Discussion Paper No. 9811, Basel, 1998b.
- Burnside, Craig and Dollar, David.** "Aid, Policies, and Growth." *American Economic Review*, September 2000, 90(4), pp. 847–68.
- Casella, Alessandra and Eichengreen, Barry.** "Can Foreign Aid Accelerate Stabilisation?" *Economic Journal*, May 1996, 106(436), pp. 605–19.
- Easterly, William.** "How did Highly Indebted Poor Countries Become Highly Indebted? Reviewing Two Decades of Debt Relief." Unpublished manuscript, The World Bank, 1999.
- Gastil, John.** *Freedom in the world: Political rights and civil liberties 1988–89*. Washington, DC: Freedom House, 1990.
- Johnson, Simon; Kaufmann, Daniel and Zoido-Lobaton, Pablo.** "Regulatory Discretion and the Unofficial Economy." *American Economic Review*, May 1998 (*Papers and Proceedings*), 88(2), pp. 387–92.
- Knack, Stephen and Keefer, Philip.** "Institutions and Economic Performance: Cross-Country Tests Using Alternative Institutional Measures." *Economics and Politics*, November 1995, 7(3), pp. 207–27.
- Lane, Philip R. and Tornell, Aaron.** "Power, Growth, and the Voracity Effect." *Journal of Economic Growth*, June 1996, 1(2), pp. 213–41.
- Mauro, Paolo.** "Corruption and Growth." *Quarterly Journal of Economics*, August 1995, 110(3), pp. 681–712.
- Sachs, Jeffrey D. and Warner, Andrew M.** "Economic Reform and the Process of Global Integration." *Brooking Papers on Economic Activity*, 1995, (1), pp. 1–95.
- Svensson, Jakob.** "Foreign Aid and Rent Seeking." Policy Research Working Paper No. 80, The World Bank, 1998.
- . "Foreign Aid and Rent-Seeking." *Journal of International Economics*, August 2000, 51(2), pp. 437–61.
- Tornell, Aaron and Lane, Philip R.** "The Voracity Effect." *American Economic Review*, March 1999, 89(1), pp. 22–46.
- Van Rijckeghem, Caroline and Weder, Beatrice.** "Corruption and the Rate of Temptation: Do Low Wages in the Civil Service Cause Corruption?" International Monetary Fund Working Paper, No. 97/73, June 1997.
- World Bank.** *The state in a changing world*. World Development Report 1997, Washington, DC: Oxford University Press, 1997.
- . *Assessing aid: What works, what doesn't, and why*. Washington, DC: Oxford University Press, 1998.
- World competitiveness yearbook.** Washington, DC: Institute for Management and Development, 1996.